

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

LUV N' CARE, LTD.

v.

KONINKLIJKE PHILIPS  
ELECTRONICS N.V., et al.

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Case No. 2:11-CV-512-RSP

**CLAIM CONSTRUCTION  
MEMORANDUM AND ORDER**

On March 21, 2013, the Court held a claim construction hearing concerning U.S. Patent Nos. 7,204,386 (“the ‘386 patent”), 7,243,814 (“the ‘814 patent”), 7,789,263 (“the ‘263 patent”), 7,789,264 (“the ‘264 patent”), and RE 43,077 (“the ‘077 patent”), asserted by Plaintiff Luv n’ care, Ltd. (hereinafter “LNC”) against the Defendants, and U.S. Patent No. 6,305,570 (“the ‘570 patent”), asserted by Counterclaim Plaintiff Avent Ltd. (hereinafter “Avent”) against LNC. The Defendants include Koninklijke Philips Electronics N.V., Philips Electronics North America Corporation, and Avent Ltd. (collectively, “Defendants”). Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Claim Construction Order.<sup>1</sup>

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<sup>1</sup> After the claim construction hearing, LNC filed its Notice of Additional Evidence as to Construction of Luv N’ Care’s Patents-in-Suit (Dkt. No. 146). The notice attached copies of documents from the file wrapper of the patents-in-suit, which LNC referred to at the hearing. The Court has considered LNC’s arguments that are based on these exhibits.

## BACKGROUND

### A. LNC's Patents

#### Overview

Each of LNC's patents names Nouri Hakim as the inventor, is related, and shares similar specifications. The '386, '263, and '077 patents have substantially identical specifications. Each is based on a provisional application filed in 1997, which eventually issued into patent 6,321,931 ("the '931 patent"). While the '386 and '263 patents are continuation applications of the '931 patent, the '077 patent is a reissue patent to the '931 patent. The '814 and '264 patents are continuations-in-part ("CIP") applications of the '931 patent, and thus have a similar specification as the above patents but also include additional disclosures. The Court refers to the '814 and '264 patents as the "CIP patents" and the '386, '263, and '077 patents as the "the non-CIP patents."<sup>2</sup>

The LNC patents describe a no-spill drinking cup apparatus by which a small child can obtain a liquid drink by sucking on the spout of the bottle top, but when no suction is applied, the spout is blocked so that no liquid can escape. The apparatus accomplishes this by use of a valve, which includes a diaphragm made of a flexible material, which is in a relaxed, closed position when no suction (i.e., negative pressure) is applied. (*See* '263 patent, col. 2, ll. 4-18.) In the closed position, the opening is sealed by a center seal-off or center stop. (*Id.*) The act of sucking at the spout of the cup creates negative pressure against the valve, "causing the valve to invert, or turn inside out, either partially or totally, thereby unblocking an opening such as an orifice or slit in the valve." (*Id.* at col. 1, l. 64 – col. 2, l. 1.) "Once the opening is unblocked, liquid can flow

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<sup>2</sup> For sake of brevity, the Court will typically cite to only the specification of the '263 patent when referencing specification support in the non-CIP patents or material common to all of the LNC patents, and will typically cite only to the '814 patent specification when referencing specification support disclosed only in the CIP patents.

freely through the valve and spout.” (*Id.* at col. 2, ll. 1-3.) In addition, the ‘814 and ‘264 patents added a disclosure of a protruding member that is inserted into the opening to prevent fluid flow. (*See, e.g.*, ‘814 patent, col. 7, ll. 51-54; col. 10, l. 54 – col. 11, l. 38.) In a preferred embodiment, the protruding member extends off of the base of the center seal off, and in a relaxed state, the center seal off presses against the opening with the protruding member extending through the opening and forming a seal against the flow of fluid through the valve. (*Id.*)

#### Prior Litigation

This lawsuit is not the first time LNC has asserted patents from the Hakim patent family against Defendants. Inventor Hakim previously sued Cannon Avent in the Western District of Louisiana (Case No. 3:02-cv-1371) on parent patents to the LNC patents, United States Patent Nos. 6,321,931 (“the ‘931 patent”) and 6,357,620 (“the ‘620 patent”) (hereinafter the “Prior Litigation”). Because some of the claim terms at issue in this action are related to claim terms discussed in the Prior Litigation, and the parties provide numerous arguments regarding the Prior Litigation, the Court briefly addresses the history of the Prior Litigation.

As discussed above, the ‘931 patent is based on a provisional application filed in 1997, the asserted ‘386 and ‘263 patents are continuations of the ‘931 patent, and the asserted ‘077 patent is a reissue of the ‘931 patent. These three patents-in-suit (the non-CIP patents) share substantially similar specifications with the ‘931 patent. The ‘620 patent is based on a continuation-in-part application of the ‘931 patent, and has substantially similar disclosures to the ‘814 and ‘264 continuation-in-part patents (the CIP patents) that are part of the present lawsuit. The parties do not dispute the familial relationship between these patents.

In the Prior Litigation, Defendants moved for summary judgment of invalidity and non-infringement, which were granted by the Magistrate Judge. (*See* Prior Litigation Dkt. Nos. 121,

122.) In particular, the Magistrate Judge granted summary judgment of non-infringement as to the '931 patent and invalidity as to the '620 patent. (*See id.*) As part of those rulings, the Magistrate Judge provided some analysis of the claims, the scope of the patent, and the prosecution history. (*See id.*) The District Court adopted the Magistrate Judge's Report & Recommendations. (*See* Prior Litigation Dkt. Nos. 133 and 134; *see also* 2005 WL 1793760 (W.D. La. May 4, 2005) and 2005 WL 1793765 (W.D. La. May 4, 2005).) On appeal, the Federal Circuit affirmed the underlying district court opinions and provided additional analysis. *See Hakim v. Cannon Avent Group, PLC*, 479 F. 3d 1313 (Fed. Cir. 2007). Additional analyses of the rulings from the Prior Litigation are addressed in the relevant sections below.

## **B. Avent's Patent**

Like the LNC patents, the '570 patent also is directed to a drinking cup for kids. The disclosed closure assembly includes a lid with a spout, an aperture through which liquid can flow, and a breather hole adjacent the spout. ('570 patent, col. 3, ll. 40-43.) In one embodiment, the spout includes an insert on which a diaphragm is mounted with a post extending through a hole on the diaphragm. (*Id.* at col. 3, l. 44 – col. 4, ll. 35.) On the bottom of the post is an enlarged head with an upper surface that provides an annular sealing surface or seat for cooperation with the diaphragm. (*Id.* at col. 3, ll. 53-61.) The diaphragm has a primary sealing portion around the center hole in the diaphragm that seals against the seat of the enlarged head and a secondary sealing portion on the outer edges of the diaphragm that covers the breather hole. (*Id.* at col. 3, l. 62 – col. 4, l. 8.) When a user sucks on the spout, the diaphragm is distorted and the primary sealing portion around the central hole lifts off the seat to permit liquid flow, and at the same time, the secondary sealing portion no longer makes a fluidtight seal with the breather hole so air can pass into the container to equalize the internal and external pressures. (*Id.* at col. 1, ll. 39-55; col. 4, ll. 45-57). When a user stops sucking on the spout, the diaphragm

returns to its rest position, in which the primary sealing portion prevents liquid from flowing through the valve and out of the spout, and the breather hole is again closed off by the secondary sealing portion to prevent air from entering the container. (*Id.* at col. 4, ll. 58-61.)

## **APPLICABLE LAW**

### **A. Claim Construction**

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *See id.* at 1313. *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term’s context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can also aid in determining the claim’s meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term’s meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficos N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor’s lexicography governs. *Id.* The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”).

Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court

understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition is entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

## **B. Means-Plus-Function Limitations**

The asserted patents also contain means-plus-function limitations that require construction. Where a claim limitation is expressed in "means plus function" language and does not recite definite structure in support of its function, the limitation is subject to 35 U.S.C. § 112, ¶ 6. *Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In relevant part, 35 U.S.C. § 112, ¶ 6 mandates that "such a claim limitation 'be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.'" *Id.* (citing 35 U.S.C. § 112, ¶ 6). Accordingly, when faced with means-plus-function limitations, courts "must turn to the written description of the patent to find the structure that corresponds to the means recited in the [limitations]." *Id.*

Construing a means-plus-function limitation involves multiple steps. "The first step in construing [a means-plus-function] limitation is a determination of the function of the means-plus-function limitation." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). Once a court has determined the limitation's function, "the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Id.* A "structure disclosed in the specification is 'corresponding' structure only if the specification or

prosecution history clearly links or associates that structure to the function recited in the claim.”

*Id.* Moreover, the focus of the “corresponding structure” inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.*

### **CONSTRUCTION OF AGREED TERMS**

The parties agree in their Joint Claim Construction Chart (*see* Dkt. Nos 142 and 143) to the following constructions of certain claim terms, phrases, or clauses appearing in the patents-in-suit:

<b>Term</b>	<b>Agreed Construction</b>
“fluid”	“liquid; air”
“air vent” (‘386, ‘264, and ‘814 patents)	“an opening for the passage of air”
“blocking element” (‘386, ‘077, and ‘263 patents)	“a structure that seals against fluid flow”
“flexible resilient diaphragm” (‘570 patent)	“a deformable membrane that is designed to recover its shape after deformation
“breather hole” (‘570 patent)	“an opening for the passage of air”
“silicone rubber” (‘570 patent)	“a silicone elastomer”

In accordance with the parties’ agreement, the Court hereby adopts and approves the above agreed-upon terms and constructions.



## CONSTRUCTION OF DISPUTED TERMS

### A. DISPUTED TERMS IN LNC's PATENTS

#### 1. "opening" and "hole"

Term	LNC's Proposal	Defendants' Proposal
<p>"opening"</p> <p>(<b>'386 patent</b>: claim 1, 2, 25, 26, 30, 31, 32, 33, 34, 35, 42, 43, 50, and 51  <b>'263 patent</b>: claim 1, 2, 8, 12, 14, 15, 25, 26, 27, and 33  <b>'814 patent</b>: claim 1, 5, 7, 8, 23, 26, 27, and 37  <b>'264 patent</b>: claim 1 and 6  <b>'077 patent</b>: claim 8 and 30)</p>	<p>"something that is open, such as a breach, aperture, perforation or hole."</p>	<p>"a slit that does not permit the passage of liquid therethrough in its resting state"</p>
<p>"hole"</p> <p>(<b>'386 patent</b>: claims 2 and 35  <b>'814 patent</b>: claims 7 and 26  <b>'263 patent</b>: claims 2, 15, 27  <b>'077 patent</b>: claim 30)</p>	<p>"an opening"</p>	<p>"a slit that does not permit the passage of liquid therethrough in its resting state"</p>

The Court finds that the term **"opening"** means an **"opening that closes when suction is not applied"** and the **"hole"** means a **"hole that closes when suction is not applied."** The crux of the parties' dispute as to this term is whether a prior district court and Federal Circuit opinion on a prosecution history disclaimer in the '931 patent applies (and controls) in this instance, whether (and what) prosecution history statements made in the '931 patent apply to the reissue patent and continuation patents asserted in this lawsuit, and if so, whether the patentee has rescinded its prior disclaimer. A discussion of the Prior Litigation is found below, along with this Court's analysis of the effects of the Prior Litigation on this disputed term and this Court's construction.

### Prior Litigation

A proper analysis of this term must include a discussion of the rulings from the Prior Litigation on a parent patent to the LNC patents, United States Patent No. 6,321,931 (“the ‘931 patent”), issued from the Western District of Louisiana and the Federal Circuit. The Court notes that LNC’s opening brief is noticeably silent about these important prior rulings, a point that Defendants unsurprisingly comment upon in their response.

In the Prior Litigation, the Defendants filed a motion for summary judgment of non-infringement on the basis that the patentee made disclaimers during the prosecution of the ‘931 patent. The Magistrate Judge agreed with the Defendants, and found that “[t]he prosecution history makes perfectly clear that Hakim specifically distinguished his invention from the prior art by limiting it to an apparatus with both (1) a slit which closes when suction is not applied, and (2) a second closure consisting of a blocking element which the slit rests against.” (Prior Litigation, Dkt. No. 121 at 9.) After the patentee’s arguments, and after the USPTO issued a Notice of Allowance, the patentee amended the claims to change “slit” to “opening.” (*Id.* at 10.) The ‘931 patent ultimately issued. (*Id.*) The Magistrate Judge found that Hakim’s amendment to add “opening” instead of “slit” did not change the requirement that the claimed device have two mechanisms to stop the flow of liquid. (*Id.*) The Magistrate Judge further ruled that “[b]ecause Hakim did not retract any of his arguments distinguishing the prior art, he is held to the restrictive claim construction he argued during prosecution of the patent.” (*Id.*)

Importantly, at no point did the Magistrate Judge construe the term “slit” or “opening.” Indeed, the Magistrate Judge *rejected* Hakim’s request to construe the term and expressly stated that *no construction was necessary* for these terms:

It is not necessary for the court to interpret “opening” or determine whether the Hakim patent requires there to be a “slit” because it is clear that what the Hakim

invention and patent does require is two separate mechanisms to close off the liquid: First, a flexible diaphragm with an opening which stretches open when suction is applied but is closed when not stretched, and second, a blocking element against which the opening in the diaphragm rests.

(*Id.* at 11.) In a footnote, the Magistrate Judge provided additional analysis regarding its decision to not construe the terms “slit” and “opening:”

While there is much discussion in brief by the parties about whether any “opening” other than a “slit” would accomplish the result envisioned by the patent, the court need not decide that question, for whatever kind of opening is created, it must be self-sealing based on Hakim's statements made in prosecuting the patent. For example, T-shaped opening, an X shaped opening, or a plus sign shaped opening would work (that is they would open when stretched and close when at rest): whether those are considered “slits” or just “openings” is beside the point.

(*Id.* at 11 n.1.) It is clear that the Magistrate Judge did not construe certain disputed terms (such as opening), but rather only concluded that the claims require two mechanisms: (1) a slit / hole / opening / orifice that opens or stretches to allow the flow of liquid when suction is applied, and (2) the seating of the slit / hole / opening / orifice against the blocking element. (*Id.* at 12-13.) Regardless of the meaning of the “slit” or “opening” claim terms, the Magistrate Judge concluded that because the claims required “two mechanisms” and because the accused product only had “one mechanism,” the Magistrate Judge recommended granting the summary judgment of non-infringement. (*See id.* at 10-14.) In particular, the Magistrate Judge found that “the diaphragm in Avent’s valve does not independently block fluid flow” and that the “only blocking mechanism in the Avent valve is the action of the diaphragm sitting against the blocking element and ‘sealing’ off the flow of liquid.” (*Id.* at 14.) The Magistrate Judge partly based his ruling on the prior art, which disclosed flexible diaphragms with holes that rested against a blocking element. (*Id.* at 14.) “Had Hakim not differentiated his invention by insisting that it involved two mechanisms, not just one, he would have had no patent at all.” (*Id.* at 14-15.)

On appeal, the Federal Circuit affirmed the district court's opinion as to non-infringement of the '931 patent and invalidity of the '620 patent. *See Hakim v. Cannon Avent Group, PLC*, 479 F. 3d 1313 (Fed. Cir. 2007). The Federal Circuit stated that "during prosecution the presence of the slit in the flexible valve material was emphasized as distinguishing all of the claims from the cited references." (*Id.* at 1316.) In contrast, the accused product had "a valve with a flexible diaphragm having a central opening, but the opening is not a slit that opens and closes, but simply a hole in the diaphragm." (*Id.*) The Federal Circuit rejected Hakim's arguments that the district court's construction "excessively constricted" the claims of the '931 patent because they allegedly "do not require a slit that opens and closes with pressure, for claims 1 and 2 use the word 'opening,' not 'slit,' for the aperture in the diaphragm." (*See id.* at 1316.) The Federal Circuit held that the term "'opening' [in the '931 patent] is not correctly construed to eliminate the sealing mechanism provided by the slitted diaphragm." (*Id.* at 1318.)

#### Analysis

The Court does not disagree with the Magistrate Judge's findings in the Prior Litigation or the Federal Circuit opinion affirming the district court's rulings in the Prior Litigation. The Court does not disagree with these courts' prior rulings that the patentee made disclaimers in the prosecution history limiting the invention to a two-mechanism device. Further, the Court does not disagree with the Federal Circuit or the prior district court that the claims in the '931 patent were limited to a two-mechanism device that included (1) a slit or opening which closes when suction is not applied, and (2) a blocking element which the slit or opening rests against.

The following question then – and the primary issue for this Court to decide as to this disputed term – is whether this two-part sealing mechanism requirement is found in the reissue patent of the '931 patent (the '077 patent) and various continuation patents of the '931 patent that

are asserted in this lawsuit. While LNC still does not admit that it made any prosecution history disclaimers in the '931 patent, it is not disputed between the parties that a prosecution disclaimer applies to any reissue patents or continuation patents unless the patentee specifically rescinded that disclaimer. *See, e.g., Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999) (“When multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.”); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003) (holding that the prosecution history disclaimer from a parent patent attaches to a child patent); *iLOR, LLC v. Google, Inc.*, 550 F.3d 1067, 1074-1075 (Fed. Cir. 2008). “As long as the same claim limitation is at issue, prosecution disclaimer made on the same limitation in an ancestor application will attach.” *Omega*, 334 F.3d at 1333.

As an initial matter, the Court rejects LNC’s argument that prosecution history does not apply because the reissue and continuation patents used allegedly materially different language. As in the parent '931 patent at issue before the Federal Circuit, the patentee had already attempted to claim the term “opening” instead of “slit” (LNC’s allegedly materially different language) and the Federal Circuit still applied the disclaimer.

The Court finds that LNC has not rescinded its prior disclaimers made in the prosecution history of the '931 patent. As the Federal Circuit in *Hakim* stated, “[a]lthough a disclaimer made during prosecution can be rescinded, permitting recapture of the disclaimed scope, the prosecution history must be sufficiently clear to inform the examiner that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited.” (*Hakim*, 479 F. 3d. at 1318.) LNC argues that its general statements in each of the prosecution histories of the continuation applications and reissue application rescinded any prior disclaimer. LNC argues

that general statements made during prosecution – that (i) terms be afforded their ordinary meaning, (ii) terms be given their broadest reasonable interpretation consistent with the specification, and (iii) no limitations be read into any of the claims – is enough to permit recapture of the disclaimed scope. (*See* LNC’s Opening Brief, Dkt. No. 130 at 5-9.) The Court disagrees. As the Federal Circuit in *Hakim* stated, to rescind a disclaimer and to permit recapture of the disclaimed scope, the prosecution history “must be sufficiently clear to inform the examiner that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited.” (*Hakim*, 479 F. 3d at 1318.) The patentee’s statements were not “sufficiently clear to inform the examiner that the previous disclaimer . . . may need to be revisited,” and the statements were not “sufficiently clear to inform the examiner” that the prior art needs to be re-visited. (*See id.*)

In various places in the prosecution history of the LNC patents, the patentee stated its conclusory intention that specific terms should be given their plain and ordinary meaning and that the term “opening” can be any “hole, slit, slot, or so forth” and no limitation “on the type or size of opening” is intended. (*See* LNC’s Opening Brief, Dkt. No. 130 at 5-9.) However, just because a patentee generically (and without support or arguments) states that a term should be given its plain and ordinary meaning does not mean that such a meaning should automatically be afforded.

At the *Markman* hearing, when asked by the Court to provide its best evidence of where it rescinded the prior disclaimer during the subsequent prosecution histories, LNC relied upon and pointed to exhibits 6, 7, and 15 to its Opening Brief (Dkt. No. 130). Exhibit 6 contains excerpts of patentee’s November 2, 2006 Response to an Office Action during the prosecution of the ‘386 patent, the relevant portions of which are shown below:

Please note that the independent claims use the term “opening” (with respect to an opening in the flexible material). The plain meaning of the term is intended – thus, the opening can be any hole, slit, slot, or so forth, without limitation.

In the litigation referenced in the IDS, Defendants alleged a restrictive meaning to the word “opening”, asserting that the opening must have self-sealing characteristics, like a slit. No such restrictive meaning is or was intended by applicant. Rather, the term should be afforded its broadest reasonable interpretation, in accordance with standard PTO practice. *See e.g.*, Manual of Patent Examining Procedure §2111 (during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification). Accordingly, the term includes any opening of any kind, without requiring any sealing characteristics or other special characteristics. All claims should be reviewed based on that interpretation, and such is the applicable meaning for any claim construction. No limitation is intended on the type or size of opening or in any other manner nor should any limitation be placed on it.

(‘386 patent, Amendment dated November 2, 2006, at 16-17, Exh. 6 to Dkt. No. 130.) The Court finds that these statements did not rescind the prior disclaimer because they do not mention the prior disclaimer, do not mention the district court’s prior ruling that an opening must have a self-sealing mechanism, do not mention the prior art references previously argued around in the parent application, and do not put the Examiner on notice that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited. (*See Hakim*, 479 F. 3d at 1318.)

Exhibit 7 contains excerpts of patentee’s April 12, 2007 Response to an Office Action during the prosecution of the ‘814 patent, the relevant portions of which are shown below:

It is submitted that all of the claims are patentable, both in view of the cited art and the decision from the Federal Circuit. The pending claims are distinct from those in the parent ‘620 patent; for example, among other differences, none of the claims of the ‘620 patent recite the air vents or air valves recited in the pending claims above. It is submitted that all of the pending claims are in allowable form.

It is requested that all of the claims be interpreted on the basis of the language set forth in them and the broadest reasonable interpretation thereof in view of the specification. Based thereon, it is requested that all of the claims be fully considered at the present time in view of all of the references of record and the Court’s decision. No limitations or prosecution disclaimers on the language of the claims should be imported into any claim from earlier prosecution or prior

versions of the claims or prior patents; and it will be assumed that no such importing is being conducted unless a statement is made by the PTO that it is doing so.

For example, it is noted that in the independent claims: any opening can be used, and in particular, the opening does not have to be a slit but can be any hole; any form or shaped post can be used; any combination of post and opening can be used; the post itself need not extend tightly through the opening at any time; and so forth. It is submitted that all of the claims are currently in fully allowable form as the language stands in the claims themselves, without any further limitations or disclaimers thereon.

(‘814 patent, Amendment dated April 12, 2007 at 15, Exh. 7 to Dkt. No. 130.) The Court finds that these statements did not rescind the prior disclaimer because they do not mention the prior disclaimer, do not mention the Federal Circuit’s prior ruling that an opening must have a self-sealing mechanism, do not mention the prior art references previously argued around in the parent application, and do not put the Examiner on notice that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited. (*See Hakim*, 479 F. 3d at 1318.) At no point do these statements provide any indication that there was a disclaimer or that the patentee was intending to rescind that disclaimer.

Exhibit 15 contains excerpts of patentee’s December 19, 2008 Response to an Office Action during the prosecution of the ‘077 patent (a reissue patent of the parent ‘931 patent), the relevant portions of which are shown below:

Use of Tern “Opening” in Claim 8 (Issued Claim 10)

It is noted that claim 8 has the same language as issued claim 10 of the ‘931 patent. It is submitted that claim 8 (issued claim 10) is patentable over Bachman and all of the art of record in the issued ‘931 patent and the present reissue application, including the references that are being forwarded under separate cover as part of an Information Disclosure Statement.

Background

In a prior litigation, Applicant sued several related Defendants accused of infringing the ‘931 patent. The Defendants argued that the allowability of the ‘931 patent claims was based on limitation of the term opening to a slit or “self-



sealing” structure, based on early remarks in Applicant's amendment dated October 2, 2000 regarding the benefits of a slit (copy enclosed). Applicant respectfully disagreed. In fact, Applicant subsequently amended any claims reciting a “slit” to more broadly recite the term “opening”. *See*, Amendment of March 16, 2001 forwarded as part of Continuing Prosecution Application (copy enclosed). In litigation, the appeals court found that district court did not err in holding that the Examiner “allowed the continuation claims without further prosecution”, and that such allowance was based upon the prosecution argument in the parent. *See, Hakim v. Cannon Avent Group PLC et al.*, 479 F.3d 1313, 1317-18 (Fed. Cir. 2007).

It is noted that Applicant had believed that there was further prosecution (e.g. an Information Disclosure Statement was submitted), and further believed for numerous reasons that the Patent Office considered an opening to include any hole. These included, for example, the following:

- a) the PTO’s internal practice to apply the broadest reasonable interpretation of claim terms during prosecution (see, MPEP §2111) (the broadest interpretation of opening includes a hole);

- b) the specification (*see*, col. 8, lines 56-61) which defines an opening as including a hole;

- c) the plain meaning of “opening”, which includes an hole;

- d) the doctrine of claim differentiation, which presumes that the dependent and independent claims do not have the same scope, since the term “slit” was moved into dependent claims; and

- e) Applicant's express statement in the March 16, 2001 Amendment that he was changing the term “slit” to “opening” in various claims to broaden those claims, which flagged Applicant’s intent to rely on a broader meaning than “slit” or its properties.

All of these factors were consistent with a definition of opening which includes any hole, and with Applicant’s belief that the claim covered any opening.

As a result. it is Applicant’s desire that the scope of the claim and its patentability be expressly confirmed herein, as further discussed below.

#### Scope of Claim 8/Issued Claim 10

It is submitted that the art of record in the ‘931 patent did not teach or suggest the claimed blocking element recited in claim 8 (issued claim 10). Nor did it teach the recited inversion feature. Likewise, the current art of record and the art being filed in the Information Disclosure Statement also do not teach or suggest those features.

Thus, it is submitted that claim 8/issued claim 10 is currently patentable and was always deemed patentable by the Patent Office regardless of whether the opening is a hole, a slit, or otherwise. It is believed that the claims are and were allowable due to the recitation of the blocking element, and that the type of opening is irrelevant to the patentability of the claim and always has been. If the Patent Office agrees, continuation is respectfully requested.

Accordingly, it is Applicant's desire that to confirm that, in the Patent Office's opinion, the type of opening has had no bearing on the patentability of the claim, and that the term opening in amended claim 8/issued claim 10 includes a hole (or any other type of opening) and always had been so deemed. If the Patent Office agrees, then claim 30 which recites a hole is consistent in scope with claim 8. However, if the Patent Office disagrees, then dependent claim 30 contradicts the scope of that claim, as the dependent claim would be broader than the independent claim. Applicant submits that claims 8 and 30 are patentable and consistent, but requests the Patent Office's opinion.

(See '077 patent, Response of December 19, 2008 at 11-13; Exh. 15 to Dkt. No. 130.) The Court finds that these statements did not rescind the prior disclaimer because they do not mention the prior disclaimer, do not mention the Federal Circuit's prior ruling that an opening must have a self-sealing mechanism, do not mention the prior art references previously argued around in the parent application, and do not put the Examiner on notice that the previous disclaimer, and the prior art that it was made to avoid, may need to be re-visited. (See *Hakim*, 479 F. 3d at 1318.) At no point do these statements provide any indication that there was a disclaimer or that the patentee was intending to rescind that disclaimer. Instead, the patentee appears to re-argue the same positions previously rejected by the Federal Circuit in an attempt to have the Examiner disagree with the Federal Circuit. Because the Court finds that the patentee did not rescind the prior disclaimer for the '077 patent, there is no broadening of the '077 patent and the Court need not address the Defendant's invalidity argument based on 35 U.S.C. § 251(d).<sup>3</sup>

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<sup>3</sup> Relying upon § 251(d), Defendants argue that a reissue patent cannot broaden the claims of an original patent if the reissue application is not initiated within 2 years of the issue date of the original patent. There is no dispute that the application that issued as the '077 reissue patent was filed six years after the parent '931 patent issued. Thus, by the express language of section 251(d), the '077 patent cannot enlarge the scope of the claims of the original patent. However,

Thus, the Court finds that the patentee's generic statements during the prosecution of subsequent applications do not rise to the level required by the Federal Circuit to rescind a prior disclaimer. (*See Hakim*, 479 F. 3d at 1318.) The patentee did not specifically point out that he no longer intended to be limited to the specific mechanism that he had previously argued was the distinguishing feature of his invention. At no point did the patentee re-argue the prior art references that required the original disclaimer in the '931 patent or request the Examiner to revisit the prior art. At a minimum, patentee's statements were not "sufficiently clear" to rescind its prior disclaimer. (*See id.*)

Thus, the Court finds that the "opening" and related terms of the LNC patents in dispute for this lawsuit still include the "two mechanism" limitation. In particular, the Court finds that in whatever form the "opening" structure is claimed – whether the claimed term is "opening" or "slit" or "hole" or "orifice" – that such a structure must include a sealing mechanism as previously determined by the Federal Circuit. However, despite the Court's finding that any "opening" structure includes a sealing mechanism, that does not preclude the Court from determining that an "opening" has a different structure than "hole" or "slit." The specification is clear that any form of an "opening" can be utilized in the valve, and the "opening [] can be, for example, a slit, a slot, an orifice, a hole, or so forth." (*See, e.g.*, '263 patent, col. 8, ll. 63-67.) Likewise, the patents sometimes broadly claim a general "opening" (*see, e.g.*, claim 8 of the '077 patent) and then provide dependent claims that provide the opening includes a hole, a slot, or a slit (*see, e.g.*, claims 17 and 31 of the '077 patent, claims 2 and 3 of the '263 patent.) Thus, the

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LNC argues that because the language did not change, there is no enlarging of claim scope. While the Court is not convinced that arguments of claim scope – as opposed to claim amendments – can effectively broaden a patent and ignore § 251(d), neither side provides any case law for this invalidity dispute and this appears to be a side argument by Defendants supporting their primary arguments of construction.

Court finds that the patentee intended the terms “opening” and “hole” and “slit” to have difference (however small) in meaning. Further, the Federal Circuit’s *Hakim* opinion and the prior district court’s opinion in the Prior Litigation do not preclude such a finding even when the prosecution history disclaimer still applies. That is, even with a disclaimer in effect, an “opening,” “slit,” and “hole” can each recite different structures but still include a “sealing mechanism” limitation.

Apart from the “sealing mechanism” limitation that the Federal Circuit affirmed for the “opening” and “slit” terms – which this Court finds was not rescinded in the subsequent prosecution histories of the LNC patents – the Court finds that the terms “opening” and “slit” and “hole” have their plain and ordinary meanings. The Court rejects Defendants’ proposal that an “opening” and “hole” are both a “slit.” Likewise, the Court rejects LNC’s proposal that a “hole” is merely an “opening.” Further, regarding the “sealing mechanism” limitation, the Court does not agree with LNC’s proposal of “does not permit the passage of liquid therethrough in its resting state.” This proposal unnecessarily complicates the issue, and the term “resting state” is not found in any of the claims. Instead, the claims use the phrases “when the user sucks” and the “application of negative pressure” (*see, e.g.*, claim 8 of the ‘077 patent, claim 1 of the ‘263 patent), and, similarly, the specification is clear that the “act of sucking at the spout . . . creates negative pressure . . . against a valve” (‘263 patent, col. 1, ll. 64-66). Consistent with the Federal Circuit’s *Hakim* opinion and the Magistrate Judge’s opinion, the Court finds that this limitation is best construed for the jury to mean an “[opening/hole] that closes when suction is not applied.” As this resolves the disputes between the parties as to these terms, no further structure or construction of the term “opening” or “hole” is necessary or required.

## 2. “valve” and “air valve”

Term	LNC’s Proposal	Defendants’ Proposal
“valve”  (’386 patent: claims 1, 8, 25, 30, 32, 34, 37, 42, and 50; ’263 patent: claims 1, 5, 12, 14, 18, 25, and 30; ’814 patent: claims 1 and 23; ’264 patent: claims 1 and 6)	“a mechanical device by which the flow of liquid, air or other gas, may be started, stopped or regulated by a movable part”	“a membrane having a slit for the passage of liquid and designed to turn inside out and that requires a structure to prevent achieving a state at which it can no longer return to its original position”
“air valve”  (’814 patent: claims 8, 9, 18, 19, 27, 28, 40, and 43)	“a mechanical device by which the flow of air may be started, stopped or regulated by a movable part”	“a membrane allowing for the passage of air and designed to turn inside out”

The Court finds that the terms “**valve**” and “**air valve**” should be given their **plain and ordinary meaning**.

There are no limiting statements in the specification, the claims, or the prosecution history that warrants a different result for these terms. The Court finds that the claim language sufficiently describes the “valve” and “air valve” terms. The claims recite the term “valve” generally, and then provide many more structural limitations related to the claimed “valve.”

Claim 1 of the ‘814 patent is representative:

An apparatus, comprising:

a no-spill drinking apparatus, said apparatus comprising an air vent and a **valve**, said **valve** comprising a post and a flexible material, said flexible material comprising an opening, said post extending into said opening, said **valve** having a closed position and an open position,

said closed position being a configuration in which liquid is blocked from passage through said opening,

said open position being a configuration in which liquid can pass through said opening,

wherein air passes into said apparatus through said air vent and said **valve** moves from said closed position to said open position upon application of negative

pressure to said flexible material, and wherein said flexible material inverts upon said application of negative pressure to said flexible material.

(emphasis added.) Thus, claim 1 of the '814 patent expressly states that the apparatus comprises a “valve,” the valve comprises a “post and a flexible material,” the flexible material comprises an “opening,” the valve has a “closed position” and an “open position,” and the valve moves from the closed position to the open position upon application of negative pressure to the flexible material.

The Court rejects Defendants’ proposal for the term “valve,” as it is superfluous with surrounding claim language, is inconsistent with surrounding claim language, and improperly imports various limitations from different claims. For example, Defendants’ proposal for the term valve includes limitations for the “flexible membrane,” the “opening,” the “inverts” term, and the “flow bridge” term. All of these limitations are recited separately in the claims and addressed separately by the parties and the Court. There is no reason to separately import these additional limitations – contrary to the specification and claims – to the simple “valve” term. While Defendants argue that the prosecution history disclaimer discussed in context of the “opening” and “hole” terms necessitates Defendants’ proposal for this term, the Court disagrees. Because the claim language expressly recites a valve comprising a flexible material comprising an opening, the prosecution history disclaimer discussed previously still applies to the valve term indirectly. In other words, a construction of plain and ordinary meaning of “valve” does not alter the Court’s construction of the terms “opening” or “hole.”

The Court finds no reason to provide a material difference to the term “air valve” as opposed to “valve.” Rather, consistent with the ordinary meanings and as proposed by LNC, a “valve” is simply a device that regulates fluid flow (which includes gas or liquid), and an “air valve” is simply a device that regulates air flow. The claims themselves provide further

limitations relating to these terms. Regarding the “air valve” term, many of the claims merely state that the air valve is closed before drinking and opened during drinking, while others specifically require the air valve to have a flexible membrane. (*Compare* ‘814 patent claims 9, 18, and 28 with claims 19 and 43.) There is no basis to import Defendants’ limitations of “a membrane allowing for the passage of air and designed to turn inside out” to all claimed instances of this simple term.

LNC’s proposal does nothing more than provide dictionary definitions to the terms that will overly complicate the issues for the jury. The Court sees no reason to adopt LNC’s proposal as opposed to merely adopting a plain and ordinary meaning for these terms. As this ruling resolves the disputes between the parties as to these terms, no further construction of the term “valve” or “air valve” is necessary or required.

### 3. “inverts,” “begins to invert,” and “inversion”

Term	LNC’s Proposal	Defendants’ Proposal
“inverts” (’814 patent: claim 1 and 25 ’263 patent: claim 13 ’077 patent: claim 8)	“reverses in position (such as turning inside out, turning upside down, moving from concave to convex, or moving from convex to concave)”	“movement that breaks a seal”
“begins to invert” (’386 patent: claims 3, 9, 11, 24, 25, 29, and 34 ’814 patent: claim 24 ’263 patent: claims 14 and 25)	“begins to reverse in position (such as beginning to turn inside out, beginning to turn upside down, beginning to move from concave to convex or from convex to concave)”	“movement that breaks a seal”
“inversion” (’077 patent: claims 31 and 32)	“reversal in position (such as turning inside out, turning upside down, moving from concave to convex, or moving from convex to concave)”	“movement that breaks a seal”

The Court finds that these related terms generally mean “to turn inside out.” More specifically, the Court finds that the terms “**inverts**” and “**inversion**” mean “**turn fully inside out**” and “**turned fully inside out,**” respectively. The Court finds that the term “**begins to invert**” means “**begins to turn inside out.**” While the Court agrees that the result of this “inversion” is to “break a seal” (as proposed by Defendants), the Court does not believe that the inclusion of such language is necessary for this term, as the patentee expressly defined this term to mean to “turn inside out.” The “break a seal” result is merely that, a result, and does not provide meaning to the term “invert.”

“When a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.” *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (citing *Phillips*, 415 F.3d at 1321). In this instance, the patentee acted as a lexicographer and defined “invert” to mean “turn inside out:”

The act of sucking at the spout of the cup creates negative pressure or a partial vacuum against a valve in the cup spout, **causing the valve to invert, or turn inside out, either partially or totally**, thereby unblocking an opening such as an orifice or slit in the valve.

Valve 42 is constructed of a flexible material which is designed **to fully invert and turn inside out, or to begin to invert and turn inside out**, upon creation of a partial vacuum against the top of the valve 42, as shown in FIG. 8(e).

(See ‘263 patent, col. 1, l. 64 – col. 2, l. 1; col. 7, ll. 2-5 (emphasis added).) Thus, the patentee expressly and repeatedly equated “invert” to “turn inside out.” There is no reason to depart from the construction the patentee provided for this term. This construction is consistent with all of the embodiments of the specification and the claims. For example, claim 1 of the ‘814 patent states that the “flexible material **inverts** upon said application of negative pressure to said flexible material” when the valve moves from a closed to open position. Similarly, claim 14 of the ‘263 patent states that the “flexible material **begins to invert** when the user sucks through



said spout.” Still further, claim 31 of the ’077 patent states that “wherein said **inversion** of said flexible valve member constitutes a change in shape from concave to convex.”

Accordingly, the Court rejects LNC’s proposal that invert means “reverses in position,” which includes numerous types of reversals in position, such as turning upside down or inside out. First, LNC’s construction is based largely on dictionary evidence, but it ignores the specification that provides repeated definitions of the disputed term. Second, LNC attempts to rely on the specification’s disclosure of inverted in the context of shaking the cup to mean that inverted in the context of movement of the valve (the disputed term here) implies the valve can be shaken or turned upside down to be inverted. However, the usage of inversion in the context of turning the *cup* upside down or shaking it is inapposite to inversion of the *valve*, particularly when the patentee expressly defined that term in the valve context. Third, LNC inappropriately cites to the inverted term appearing in Avent’s ’570 patent specification in the context of shaking the cup in support of its construction. Such reliance on a different patent in a different context is irrelevant to the meaning of inverted in the context of movement of the valve for LNC’s patents. Fourth, LNC cites to various prosecution history statements made by patentee that allegedly support its construction. However, such statements do not void the patentee’s express definition of inverted in the specification, and further, such statements are unclear at best. For example, in one instance the patentee cites that the term “invert” means to “reverse in position” (in the context of an inside surface becoming an outside surface and a membrane moving from concave to convex), but in another instance in the prosecution history the patentee states that “invert” means for the membrane to “turn inside out.” (See LNC’s Opening Brief at 13, Dkt. No. 130; see also ’814 patent, Amendment dated April 12, 2007 at 16, Exh. 7 to Dkt. No. 130; see also,

'814 patent, Response of February 12, 2007 to Office Action of January 19, 2007 at 5, Exh. 9 to Dkt. No. 130.) Thus, the Court rejects LNC's proposal.

The next issue as to these terms is the difference, if any, between the terms "inverts," "begins to invert," and "inversion," and whether such terms require a total or complete inversion as proposed by Defendants. The specification is clear that inversion can be a partial inversion or complete inversion. (*See* '263 patent, col. 1, l. 64 – col. 2, l. 1.) Likewise, the specification is clear that the valve can "fully invert" or "begin to invert." (*See* '263 patent, col. 7, ll. 2-5.) The specification also shows figures of the valve "before and after it inverts." (*Id.* at col. 7, ll. 15-17; Figs. 8(d) and 8(e).) It is clear that whether the valve is in a partial or complete inversion, the valve is no longer sealed and it allows fluid flow. Similar to the specification, some claims require that the flexible material of the valve "inverts after the user sucks" (*e.g.*, claim 13 of the '263 patent) and other claims require that the flexible material of the valve "begins to invert when the user sucks" (*e.g.*, claim 14 of the '263 patent). (*See also* claims 24 and 25 of the '814 patent, requiring the flexible material to "begin to invert" or "invert," respectively.)

The Defendants rely heavily on an argument that the Western District of Louisiana and the Federal Circuit opinions somehow govern the construction of these terms. However, those prior decisions involved certain parent patents to the LNC patents asserted here, and did not construe the terms "inverts," "inversion," or "begins to invert." At best, in discussing the validity of the '620 patent claims over the prior art IT '286 reference, the Western District of Louisiana court stated that whether the claimed device inverts, begins to invert, flexes, slides, lifts up, etc., only means that the device allows liquid to flow when it is no longer sealed:

Finally, Hakim argues that unlike the IT '286 device his device requires that the flexible member "invert" or "begin to invert" and he embarks on semantical gymnastics to create a distinction in the two devices. This is not, as they say, rocket science; both of these extremely simple devices are made so that, when a

child sucks on the spout, the flexible member flexes up on the post, breaking the seal, and allowing the flow of liquid. It matters not whether this movement is called inverting, “beginning to invert”, flexing, sliding, moving, lifting or any other term denoting its movement. Both devices allow the liquid to flow when suction moves the flexible diaphragm from its “sealed” position on the post.

(See Prior Litigation, Dkt. No. 122 at 11-12.) At no point did the prior courts construe “inverts” or “begins to invert.” At no point did the court construe each of these terms to only mean “movement that breaks a seal.” Thus, the prior decisions are not dispositive of the claim construction issues raised by these terms. While the Court finds (as did the Magistrate Judge) that when the flexible membrane inverts or begins to invert that fluid flows (*e.g.*, the flexible member is no longer sealed) and agrees with Defendants’ construction to that extent, Defendants’ proposal does not provide meaning to the “invert” terms.

Consistent with the claims and the specification, the Court finds that “inverts” and “inversion” refer to the valve fully inverting. The specification uses the terms “fully” and “totally” to refer to a complete inversion. (See ‘263 patent, col. 1, l. 64 – col. 2, l. 1; col. 7, ll. 2-5.) Thus, the Court construes the terms “inverts” and “inversion” to mean “turn fully inside out” and “turning fully inside out,” respectively. As the claims and specification clearly teach that the flexible membrane can be partially inverted or fully inverted and that “begins to invert” is not the same as “invert,” the Court rejects Defendants’ proposal that “begins to invert” must mean the same as “inverts.” This is not contradictory to the Magistrate Judge’s prior opinion, as he merely found that fluid flows whether the membrane has inverted or begins to invert. Likewise, the Court finds that the term “begins” is a simple and readily understood term, and there is no need to substitute “starts” for this term as LNC proposes. As required by the claims and the specification, the flexible membrane must turn inside out enough to break the seal and allow fluid flow through the valve. Indeed, in the claims involving the “begins to invert” limitation, the flexible material is required to “rise off” of the blocking element or move up the post (to

unblock the opening and allow liquid to pass) when the user sucks through the spout. (*See, e.g.*, claims 14 and 25 of the ‘263 patent, claims 1 and 34 of the ‘386 patent, claim 23 of the ‘814 patent.) Thus, this term is not “insolubly ambiguous” and the Court rejects Defendants’ unsupported arguments that this claim is indefinite. The Court notes that neither party objected to the Court’s construction of these terms when they were offered at the *Markman* hearing.

#### 4. “block()” / “unblock()” (relating to the flow of fluid)

Term	LNC’s Proposal	Defendants’ Proposal
“block()” / “unblock()” <b>(‘386 patent:</b> claims 1, 25, 30, 32, 34, 41, 42, and 50 <b>’077 patent:</b> claim 8 <b>’263 patent:</b> claims 1, 8, 12, 14, 25, and 33 <b>’814 patent:</b> claims 1 and 23 <b>’264 patent:</b> claim 1, 6)	“obstruct (so as to seal re fluid, or bar re movement)” / “unobstruct”	“seal” / “unseal”

The Court finds that the terms “**block()**” and “**unblock(),**” relating to the flow of fluid, mean “**seal**” and “**unseal,**” respectively. These terms appear in asserted claims of the ‘386, ‘263, ‘814, ‘077, and ‘264 patents. Claim 1 of the ‘263 patent and claim 1 of the ‘814 patent (portions shown below) are representative:

[claim 1 of the ‘263 patent] (e) wherein said opening of said flexible material rests against said **blocking element** when the user is not drinking from said spout; (f) wherein said flexible material rises off of said **blocking element**, **unblocking** said opening, when the user sucks through said spout to drink from said spout;

[claim 1 of the ‘814 patent] ... said valve having a closed position and in an open position, said closed position being a configuration in which liquid is **blocked** from passage through said opening, ...

(emphasis added.)

In its opening brief, LNC states that “[t]he parties appear to all agree that regarding blocking of the opening, the opening is sealed to prevent fluid flow.” (Dkt. No. 130 at 18.) In

their responsive brief, Defendants agree that “[t]here does not appear to be an actual dispute about the claim terms ‘block()’ and ‘unblock(),’ as they relate to the flow of fluid through the claimed valve.” (Dkt. No. 137 at 17-18.) The Court agrees that there is no material dispute as to this term in the fluid flow context. Rather, the parties disagree as to the best way to convey the sealing aspect of this term.

The parties have agreed that the term “blocking element” means “to seal against.” In context, the “blocking element” blocks and unblocks the flow of liquid through the valve’s opening. (*See, e.g.*, claim 8 of the ‘077 patent and claim 1 of the ‘386 patent.) Consistent with the parties’ agreed upon language for the “blocking element” term, the block/blocking language should be consistently construed to mean “seal” and not “obstruct.” It is clear – and the parties do not dispute – that the claims require the opening to be sealed to prevent fluid flow. Further, the Court finds that the plain and ordinary meaning of “obstruct” (proposed by LNC) does not necessarily require sealing of the opening, which is required by the claims. Indeed, in the context of fluid flow, even LNC proposes that its “obstruct” language should be interpreted to mean “so as to seal.” The Court rejects LNC’s proposal as cumbersome and not helpful, as it inherently provides two different meanings to the term “obstruct” in its attempt to argue that the term “block” has the same meaning in all instances of the term. Thus, the Court adopts the proposal by Defendants for this term. The Court notes that LNC did not object to the Court’s construction of these terms when they were offered at the *Markman* hearing.

5. “blocks” (relating to the movement of a flexible material)

Term	LNC’s Proposal	Defendants’ Proposal
“blocks”  (‘386 patent: claims 1 and 41 ‘263 patent: claims 1, 14, and 25)	“obstruct (so as to seal re fluid, or bar re movement)”	“prevents”

The Court finds that the term “**blocks**,” in the context of preventing movement of a flexible material, means “**prevents**.” The parties agree – and the claims require – that the term “blocks” means something different in the differently claimed contexts.

The ‘386 and ‘263 patents recite “blocks” in the context of movement of a flexible material. Claim 1 of the ‘263 patent is representative and a portion is shown below:

(h) and wherein said apparatus comprises a barrier above said flexible material which **blocks** said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.

(emphasis added.) The only relevant disclosure in the specification for “blocks” in the context of movement of a flexible material is regarding the “flow bridge”

In a further embodiment, the valve assembly is provided with a flow bridge 84. Flow bridge 84 **blocks movement or expansion of the valve** 42 beyond a certain maximum distance to prevent the valve from overextending itself, or from being subjected to excessive strain or distension, as shown in FIG. 8(e). Thus, the flow bridge **prevents the valve** from inverting beyond the point where it can no longer easily revert to its original position. In addition, the flow bridge provides a shield or a barrier preventing the valve from damage. Thus, it blocks objects such as a spoon or so forth, whether in a dishwasher or otherwise, from easily damaging the valve.

(See, e.g., ‘814 patent, col. 8, l. 62 – col. 9, l. 6.) The specification equates the concept of blocking with preventing (*blocking* movement or expansion of the valve to *preventing* the valve from inverting beyond a certain point). (See *id.*) The Court rejects LNC’s proposal as cumbersome and not helpful, as it inherently provides two different meanings to the term “obstruct” in its attempt to argue that the term “block” has the same meaning in all instances of

the term. Indeed, in the context of movement of the flexible material, even LNC proposes that its “obstruct” language should be interpreted to mean “bar re movement.” The Court finds no material difference between the “bar” language proposed by LNC (as one of its two “definitions” for the term “obstructs”) and the “prevents” language proposed by Defendants. Because the specification equates “blocks” to “prevents” in the context of movement of the valve, the Court adopts the proposal by Defendants. The Court notes that LNC did not object to the Court’s construction of this term when it was offered at the *Markman* hearing.

#### 6. “center stop” and “post”

Term	LNC’s Proposal	Defendants’ Proposal
“center stop” (’814 patent: claims 5 and 37)	“a structure that seals against fluid flow”	“a protruding structure, which seals off the flow of liquid through a flexible material, extending from a base”
“post” (’814 patent: claims 1, 2, 8, 10, 23, 27, and 29 ’264 patent: claims 1 and 6)	“a pillar, column, shaft, pole, or stake, or upright support (including any shape, size, or configuration head or base)”	“a protruding structure that seals off the flow of liquid through a flexible material”

These are related terms. The Court finds that the term **“center stop”** means **“a structure that seals against fluid flow”** and that the term **“post”** means **“a protruding structure that seals against fluid flow.”**

Of relevance for this term is the general prosecution history for the LNC patents. As stated above in the Background section, the ‘814 and ‘264 patents are CIP patents of a common parent application and have additional disclosure in their specifications as compared to the other LNC patents, with the primary difference being the disclosure of a “protruding member.” Thus, while the term “center stop” appears in all of the LNC patents (both the CIP and the non-CIP patents), the term “post” is only found in the specifications of the CIP patents (the ‘814 and ‘264

patents). Claim 1 of the '814 patent is representative of the "post" term, and dependent claim 5 of the '814 patent is representative of the "center stop" term. Both claims are shown below:

1. An apparatus, comprising:

a no-spill drinking apparatus, said apparatus comprising an air vent and a valve, said valve comprising a **post** and a flexible material, said flexible material comprising an opening, said **post** extending into said opening, said valve having a closed position and in an open position,

said closed position being a configuration in which liquid is blocked from passage through said opening,

said open position being a configuration in which liquid can pass through said opening,

wherein air passes into said apparatus through said air vent and said valve moves from said closed position to said open position upon application of negative pressure to said flexible material, and wherein said flexible material inverts upon said application of negative pressure to said flexible material.

5. A no-spill drinking apparatus as claimed in claim 1, wherein said opening is against a **center stop** in said closed position.

('814 patent, claims 1 and 5 (emphasis added).)

Center Stop

The term "center stop" is found in claims 5 and 37 of the '814 patent, which provide that the previously claimed opening "is against a center stop in said closed position." The specification of the '263 patent (a non-CIP patent) equates "center seal-off stop" to "center stop":

As shown in FIGS. 5, 6, 8 and 9, upon closing a subunit (e.g. subunit 37 in FIG. 3), valve 42 sits securely against **center seal-off stop or center stop 52** in sealing unit 37a, with the opening 70 in valve 42 being flush against **center seal-off stop 52**. Valve 42 includes a top, proximal side which will face the spout of the cap, and a distal side which rests against the center seal-off stop when the valve is placed in valve holder 31.

**Center stop 52** functions as a sealing portion or blocking element of the valve assembly which seals off and blocks the flow of fluid through the valve. In a preferred embodiment, **center stop 52** consists of a solid central area or portion 56 which is impenetrable to the flow of liquid therethrough. Surrounding the central area or portion 56 is preferably a peripheral area or region 58, having open



areas such as slots or so forth, for allowing the passage of liquid therethrough, as shown, for example in FIG. 8(a). Central area 56 or **center stop 52** further includes stems 74. As shown in FIG. 9, stems 74 can further be reinforced with braces 72, which are reinforcing elements, which provide additional material strength to the connection between the stems and the valve holder.

When in the normal resting position, valve 42 relaxes to sit securely against the **center stop 52**, as shown in FIG. 8(d). In this resting position, opening or orifice 70 of valve 42 presses firmly against the central area 56 of **center stop 52**, preventing any fluid flow through the valve, and maintaining the valve in a closed configuration.

(‘263 patent, col. 6, ll. 39-65)(emphasis added).) The ‘814 patent (a CIP patent) provides additional disclosure of the center stop in the middle of the above quoted specification:

In one embodiment, center stop 52 consists of a solid substantially flat central area or portion 56 which is impenetrable to the flow of liquid therethrough. In a further, preferred, embodiment, center stop or seal off 101 is provided with a protruding member 108 extending off of the base of the center seal off, as shown in FIG. 15.

(‘814 patent, col. 7, ll. 48-54.) It is clear that the “center stop” functions as a “sealing portion or blocking element of the valve assembly which seals off and blocks the flow of fluid through the valve.” (*Id.* at col. 6, ll. 47-49.) The specification clearly teaches that the center stop acts as a seal, with or without a protruding member. (*See id.*) The parties’ competing proposals each have similar “sealing” concepts and do not dispute this issue. Both parties agree, as does the Court, that the “center stop” structure must seal to prevent fluid flow. Further, because the specification teaches that the “center stop” functions as a “sealing portion or blocking element of the valve assembly which seals off and blocks the flow of fluid through the valve” (‘814 patent, col. 7, ll. 46-48), and because the parties have also agreed that the term “blocking element” means “a structure that seals against fluid flow,” the Court adopts equivalent sealing language for this term (consistent with that proposed by LNC) and finds that “center stop” is a structure “that seals against fluid flow.”

The parties' primary dispute as to "center stop" revolves around whether it must be limited to a "protruding structure" as proposed by Defendants. There is no dispute that the original disclosure of "center stop" in the non-CIP patents (the '263, '077, and '386 patents) was substantially flat and did not include a protruding member. (*See* '263 patent, col. 6, ll. 39-65, Fig. 8 (element 52).) Further, the parties do not dispute that in the CIP patents there are embodiments of a "center stop" in the '814 patent with and without a "protruding member." LNC contends that Defendants' "protruding member" requirement reads out a preferred embodiment, whereas Defendants contend that their construction expressly covers the alternatively disclosed embodiment, which is specifically claimed by the relevant claim language.

Claims 1 and 23 of the '814 patent require a valve comprising a post and a flexible material, wherein the post extends into an opening on the flexible material, and the valve has a closed position, such that liquid is blocked from passage through the opening. Claims 5 and 37 of the '814 patent recite the "center stop" limitation, such that the "opening is against a center stop in said closed position." There is nothing in the claims that requires the protruding structure to extend from the base, nor is there any express requirement that the center stop includes a post. The mere fact that the claims recite both a "post" and a "center stop" does not require the "center stop" to mean a "post." Indeed, the fact that claim 1 expressly requires the post to extend into an opening on the flexible material, and dependent claim 5 recites that the opening is against a center stop implies that the center stop does not necessarily mean the post.

The specification clearly teaches that, even with a protruding member extending from the center stop, the center stop is a separate element, which implies that the center stop is not defined by the protruding member as the Defendants suggest. (*See* '814 patent, col. 7, ll. 51-54 ("center

stop or seal off 101 is provided with a protruding member 108 extending off of the base of the center seal off”); col. 10, ll. 27-30 (“the valve includes a valve member 126 and a center stop or seal off with a protruding member”); col. 10, ll. 54-56 (“center stop or sealing member 101 is provided with a protruding member 108 which extends off of a base 104”); col. 10, ll. 64-66 (“male sealing or protruding member 108 extends off of the base 104 as a protrusion or projection”); col. 11, ll. 1-3 (“the protruding member ... near the base 104 of the center seal-off”), col. 11, ll. 9-13 (“In the relaxed state, with no negative pressure applied, center seal off 101 presses against orifice 118, with protruding member 108 tightly extending through the orifice and forming a seal against the flow of fluid through the valve.”).) The fact that an embodiment may allow a protruding member to extend from a base of the “center stop” does not require that the entire “center stop” be a “protruding member . . . extending from a base” as proposed by Defendants. The Court finds that Defendants are impermissibly combining the “post” limitation into the meaning of the “center stop” term. Accordingly, the Court rejects Defendants’ proposal that the “center stop” term is limited to a “protruding structure.” The Court notes that neither party objected to the Court’s construction of this term when it was offered at the *Markman* hearing.

### Post

As mentioned above, “post” is only found in the specifications (and claims) of the CIP patents. While there are numerous disclosures of a protruding member in the specification of the CIP patents, there is only one reference to a “post:”

Further preferably, male sealing or protruding member 108 is a **post** or pin, such as a frustoconical or conical **post**, or a finger-like shaped member. Male sealing or protruding member 108 extends off of the base 104 as a protrusion or projection toward the orifice 118. Preferably, sealing or protruding member 108 is tapered. Specifically, in the preferred embodiment, the protruding member 108 has a greater diameter at its bottom portion (near the base 104 of the center seal-

off), than its diameter at the top. In the preferred embodiment, base 104 is substantially flat.

(See ‘814 patent, col. 10, l. 62 – col. 11, l. 4.) In this sole disclosure, a preferred embodiment of the “male sealing or protruding member 108” is a “post or pin.” (*Id.*) The term “post” is recited in independent claims 1 and 6 of the ‘264 patent and independent claims 1 and 23 of the ‘814 patent (along with various dependent claims).

The parties first dispute whether the “post” must seal the valve from fluid flow. As shown above, claim 1 of the ‘814 patent requires a valve comprising a post and a flexible material, wherein the post “extend[s] into an opening” on the flexible material, and the valve has a closed position, such that liquid is blocked from passage through the opening. (*See also* claims 1 and 6 of the ‘264 patent and claim 23 of the ‘814 patent.) Claim 23 of the ‘814 patent has a similar “post” requirements of claim 1, but additionally specifies that the opening moves along the post toward the spout from a closed position to create an open position to allow liquid to pass. While the claims expressly require the post to only extend into the opening, the Court finds that the claims require that the post must seal against fluid flow by the inclusion of a closed position of the valve. That the post must seal against fluid flow is supported and required by the specification. The specification states that the “male sealing or protruding member 108 is a post or pin.” (*See* ‘814 patent, col. 10, ll. 62-63.) The specification repeatedly characterizes the protruding member as a sealing member. (*See* ‘814 patent, col. 10, l. 62 – col. 11, l. 4; *see also* col. 11, ll. 5-61; Abstract.) Based on the specification and the claims, the Court finds that the post must “seal against fluid flow.” *See, e.g., Retractable Techs., Inc. v. Becton, Dickinson and Co.*, 653 F. 3d 1296, 1305 (Fed. Cir. 2011) (a court must “strive to capture the scope of the actual invention, rather than strictly limit the scope of claims to disclosed embodiments or allow the claim language to become divorced from what the specification conveys is the invention”).

This construction is consistent with how the parties defined the sealing aspect of “blocking element” and how the Court defined the sealing aspect of “center stop.”

The Court rejects LNC’s arguments that merely because the patentee provided self-serving and general statements in the prosecution history (and not made to overcome prior art rejections) that the post need not seal the opening in the valve’s closed position that the Court must construe the post to not seal in contradiction to the claims and the specification. (*See* LNC’s Opening Br. at 20-21, Dkt No. 130.) Likewise, the Court rejects LNC’s unsupported argument that the post can simply be used to guide the movement of the opening in the flexible material, without sealing it. There is no support – nor has LNC offered any – in the claims or the specification for such a proposition. At best, LNC argues that because a post may have a uniform diameter (as with a cylinder), the hole cannot seal on the lower portion of the post, since it is the same diameter as the upper portion of the post. (*See* LNC’s Reply Br. at 9, Dkt. No. 140.) The Court finds LNC’s arguments unconvincing, and the mere fact that the post does not have a larger diameter at the bottom does not prevent the post from sealing.

Regarding the disputed shape of the “post,” the specification teaches that the protruding member is a “post or pin, such as a frustoconical or conical post, or a finger-like shaped member.” (*See* ‘814 patent at col. 10, ll. 62-64.) In a preferred embodiment, the protruding member “has a greater diameter at its bottom portion.” (*Id.* at col. 11, ll. 1-2.) Likewise, certain dependent claims of the ‘814 patent further define the post to be “at least partially tapered” (claim 2) and to have “a greater diameter at its bottom than at its top” (claim 29). Thus, while a post is not necessarily limited to the shape of a tapered post, it must still be in the form of a post, and LNC’s Reply Brief admits that “[t]he ordinary and customary meaning of post, pin, and finger-like all include a cylindrical structure.” (Dkt. No. 140 at 9.) The Court rejects LNC’s

proposed construction as not helpful to the jury, which merely strings together various dictionary definitions. At the *Markman* hearing, LNC had no objection to the phrase “protruding structure” offered by Defendants. Thus, the Court finds the shape of the post to be “a protruding structure.”

#### 7. “flow bridge,” “barrier,” and “shield”

Term	LNC’s Proposal	Defendants’ Proposal
“flow bridge” (’386 patent, claim 1)	“a barrier above a flexible material which blocks the flexible material from being able to move beyond a maximum distance”	“a structure that blocks movement or expansion of the valve and prevents the valve from overextending itself beyond the point where it can no longer return to its original position and that prevents the valve from damage from foreign objects”
“barrier” (’386 patent: claims 1 and 41 ’263 patent: claims 1, 14, and 25)	“a structure that bars an object (e.g. the flexible material) from being able to move beyond it”	“a structure that blocks movement or expansion of the valve and prevents the valve from overextending itself beyond the point where it can no longer return to its original position and that prevents the valve from damage from foreign objects”
“shield” (’814 patent: claims 6, 38, and 39)	“a barrier that can be protective”	“a structure that blocks movement or expansion of the valve and prevents the valve from overextending itself beyond the point where it can no longer return to its original position and that prevents the valve from damage from foreign objects”

These are related terms. The Court finds that the term **“flow bridge” does not need further construction**, the term **“barrier”** means a **“restraining structure,”** and the term **“shield”** means a **“protective structure.”**

In its analysis, the Court first focuses on the claim language. The term “flow bridge” is found only in claim 1 of the ‘386 patent, reproduced below:

(h) and wherein said apparatus comprises a **flow bridge**, said **flow bridge** being a **barrier** above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.

(emphasis added.) In addition to the above claim, the term “barrier” is found in claim 41 of the ‘386 patent and claims 1, 14, and 25 of the ‘263 patent, each of which are reproduced below:

[41] A method as claimed in claim 34, wherein said apparatus comprises a **barrier** above said flexible material which blocks movement of said flexible material after said flexible material rises off of said blocking element.

[1] (h) and wherein said apparatus comprises a **barrier** above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.

[14] (i) wherein said apparatus comprises a **barrier** above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.

[25] (i) wherein said apparatus comprises a **barrier** above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element;

(emphasis added.) The term “shield” is found in claims 6, 38, and 39 of the ‘814 patent, each of which are reproduced below:

[6] A no-spill drinking apparatus as claimed in claim 1, comprising a **shield** that said flexible material hits upon said application of negative pressure.

[38] A no-spill drinking apparatus as claimed in claim 23, wherein said subunit is a **shield**.

[39] A no-spill drinking apparatus as claimed in claim 23, wherein said subunit is a **shield**, and wherein said flexible material inverts upon said application of negative pressure.

(emphasis added.)

The only relevant disclosure in the specification for “flow bridge,” “barrier,” and “shield” is found in the below paragraph

In a further embodiment, the valve assembly is provided with a **flow bridge 84**. **Flow bridge 84** blocks movement or expansion of the valve 42 beyond a certain maximum distance to prevent the valve from overextending itself, or from being subjected to excessive strain or distension, as shown in FIG. 8(e). Thus, the **flow bridge** prevents the valve from inverting beyond the point where it can no longer easily revert to its original position. In addition, the **flow bridge** provides a **shield** or a **barrier** preventing the valve from damage. Thus, it blocks objects such as a

spoon or so forth, whether in a dishwasher or otherwise, from easily damaging the valve.

(‘814 patent, col. 8, l. 62 – col. 9, l. 6.; *see also* ‘263 patent, col. 7, ll. 54-65) (emphasis added).)

The specification does not equate a “flow bridge” to a “shield” and a “barrier.” (*See id.*) Rather, the “flow bridge provides a shield or a barrier preventing the valve from damage.” (*Id.*) The specification teaches that the “flow bridge” blocks movement or expansion of the valve beyond a certain maximum distance to prevent the valve from overextending itself. (*Id.*) In some embodiments, it may also act as a “shield” or a “barrier.” This is consistent with claim 1 of the ‘386 patent, which states that the “flow bridge being a barrier [] which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.” Contrary to Defendants’ assertions, the claims and the specification treat the terms differently.

Regarding the term “shield,” the Court finds the patentee never intended the term to mean anything other than its plain and ordinary meaning. There are no limiting statements in the specification, the prosecution, or the claims that would suggest otherwise. The Court rejects Defendants’ proposal for the above-mentioned reasons. The Court rejects LNC’s proposal in that it also includes the disputed term “barrier” as part of the construction and merely states that the structure “can be” protective rather than actually being protective. Indeed, in its reply brief, LNC admits that “shield” and “barrier” are not synonymous, and argues that while a shield is always a barrier, there are numerous barriers that are not shields. (Dkt. No. 140 at 10.) The specification describes an aspect of the flow bridge being a “shield or a barrier,” which “prevent[s] the valve from damage.” (*See* ‘814 patent, col. 9, ll. 2-6.) Similarly, the claims including the term “shield” merely state that the apparatus contains a “shield” that the “flexible material hits upon.” (*See, e.g.*, claims 6, 38, and 39 of the ‘814 patent.) The use of shield in the



specification and claims is consistent with shield's ordinary meaning. Accordingly, the Court finds that the term "shield" means a "protective structure," which is most consistent with its plain and ordinary meaning and the use of the term in the claims and the specification.

Regarding the term "barrier," the Court finds the patentee never intended the term to mean anything other than its plain and ordinary meaning. The specification describes an aspect of the flow bridge being a "shield or a barrier," which "prevent[s] the valve from damage." (*See* '814 patent, col. 9, ll. 2-6.) Claims of the '386 and '263 patents both state that the barrier "blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element." There are no limiting statements in the specification, the prosecution, or the claims that would suggest the barrier was intended to mean anything other than its plain and ordinary meaning. The Court rejects Defendants' proposal for the above-mentioned reasons. Further, the Court rejects Defendant's proposal because it is superfluous with and inconsistent to the actual claim language surrounding the term "barrier." The Court rejects LNC's proposal because it is too complicated and includes a form of the disputed term, "bar," in the proposed construction. Accordingly, the Court finds that the term "barrier" means a "restraining structure," which is most consistent with its plain and ordinary meaning and the use of the term in the claims and the specification.

Regarding the term "flow bridge," while the parties agree that the term does not have any plain and ordinary meaning, the Court finds that the meaning of the "flow bridge" term is sufficiently recited in the claim. Claim 1 explicitly states that the "flow bridge [is] a barrier above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element." This claim language largely follows the proposal offered by LNC. However, because adopting LNC's

construction would make the surrounding claim language superfluous, it is rejected. In contrast, the Court rejects Defendants’ proposal because it is superfluous with and inconsistent to the actual claim language surrounding the term “flow bridge” and “barrier.” Further, Defendants’ construction contains limitations not found in the claims and places too much emphasis on a preferred embodiment of the specification at the expense of the claim language. Still further, Defendants’ construction confuses intended uses and benefits of the flow bridge (*e.g.*, acting as a shield to prevent damage) described in the specification rather than the actual definition of the “flow bridge” term itself. The specification contains various descriptions of what a “flow bridge” does (*see* ‘814 patent, col. 9, ll. 2-6) and offers various intended uses and benefits, but the claim language itself – which controls – specifically describes the claimed “flow bridge” structure: a “barrier above said flexible material which blocks said flexible material from moving beyond a maximum distance after said flexible material rises off of said blocking element.” Accordingly, no further construction is necessary for this term, as the claim sufficiently defines the structure of “flow bridge.”

## 8. “subunit”

Term	LNC’s Proposal	Defendants’ Proposal
“subunit”  (’814 patent: claims 23, 38, and 39 ) (’264 patent: claims 1 and 6)	“a part of a larger unit (of the no-spill apparatus)”	(construed under § 112, ¶ 6)  A structure “intended to hold a single valve therein” (’814 patent at col. 6, ll. 62-63); one part of a larger barbell-shaped valve holder (’814 patent at Fig. 3)

The Court finds that the term “**subunit**” means a “**valve holder subunit.**” LNC ignores the claims and the specification and solely uses a dictionary definition in its attempt to define the subunit term in a vacuum. In contrast, Defendants propose that this term is a means-plus-function limitation, or, in the alternative, is indefinite. The Court rejects both proposals. “When

a patentee explicitly defines a claim term in the patent specification, the patentee's definition controls." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (citing *Phillips*, 415 F.3d at 1321). In this instance, the patentee acted as a lexicographer and defined "subunit" to mean a "valve holder subunit." Further, this definition is consistent with the use of the term in the claims.

The specification has numerous citations to the "subunit" term, a few of which are shown below:

The **valve holder is constructed as a two subunit assembly**, with one subassembly holding a valve with a larger slit or orifice for fluid flow than the valve in the second subunit.

FIGS. 16(a)-(d) are a series of views of one of the **valve holder subunits** of the valve holder shown in FIGS. 15(a)-(f). FIG. 16(a) is a top view of the **valve holder subunit**, for attachment to a cap of a no spill cup. FIG. 16(b) is a cross sectional view of the **valve holder subunit** of FIG. 16(a). FIG. 16(c) is a side view of the **valve holder subunit** shown in FIG. 16(a). FIG. 16(d) is a perspective view of the **valve holder subunit**.

In the preferred embodiment, **valve holder 31 is a two-subunit** assembly connected by bridge 34. Each **subunit** of the two-subunit assembly is sized to frictionally fit into and be held by either one of tapered holes 16 and 18. The spacing between tapered holes 16 and 18 is the same as between the **subunits of valve holder 31**, such that the valve holder can be easily secured within cap 11.

FIG. 3 is an enlarged, exploded, perspective view of the valve holder of the present invention. Valve holder 31 consists of two **valve holder subunits 37** and 39, connected by a bridge 34. Each **valve holder subunit** is intended to hold a single valve therein. As shown in the figure, valve or valve member 42 is intended for placement in **subunit 37**, and valve or valve member 45 is intended for placement in **subunit 39**.

**Valve holder subunits 37** and 39 open into sealing units 37a and 39(a) and valve retainers or endcaps 37b and 39(b), respectively. Taking **subunit 37** as an example of the function of each **subunit**, as shown in FIG. 3, subunit 37 is initially in an open position in which the sealing unit and the valve retainer have been pulled or hinged apart.

See ‘814 patent, col. 2, ll. 37-40; col. 4, ll. 9-16; col. 6, ll. 41-47; col. 6, ll. 59-66 ; col. 7, ll. 4-9 (emphasis added). Thus, the specification repeatedly equates “valve holder subunit” to “subunit.” Each reference to the subunit in the specification refers to the valve holder subunit.

Certain asserted claims of the ‘814 and ‘264 patents recite a “subunit.” For example claim 1 of the ‘264 patent provides that “wherein said apparatus comprises a subunit that said flexible material hits upon said application of negative pressure to said flexible material.” (emphasis added). Likewise, claim 23 of the ‘814 patent requires “(d) a subunit of said apparatus, ... (f) wherein upon said application of said negative pressure, said flexible material hits said subunit.” (emphasis added.)

LNC’s proposal ignores the claims and the specification. The numerous references to a subunit being a valve holder in the specification is not a mere example of the invention, but is an intended definition of “subunit” to mean a “valve holder subunit.” Further, the ordinary meaning of the term “subunit” is not helpful as that term was claimed and used in the specification, and fails to provide any structure to this term. For example, if “part” (the ordinary meaning of subunit) were to be inserted into claim 23(d) of the ‘814 patent for “subunit,” the phrase would merely read “a part of said apparatus” without any further structure. Indeed, during the prosecution of the ‘814 patent, the patentee amended the claim from “valve holder subunit” to “subunit” in an effort to “improve the language of the claim,” which shows that it was never intended to be a means-plus function limitation and confirms the valve holder subunit meaning. (See, e.g., ‘814 patent, Amendment dated April 12, 2007 at 14, Exh. 7 to Dkt. No. 130.)

The Court finds that this is not a means-plus function limitation. First, the claims do not use the terms “means,” and thus there is a presumption that the term is not recited as a means-plus function limitation. *Al-Site Corp. v. VSI International, Inc.*, 174 F.3d 1308, 1318 (Fed. Cir.

1999) (“when an element of a claim does not use the term “means,” treatment as a means-plus-function claim element is generally not appropriate”). Second, the use of “subunit” in the claims and the surrounding claim language is not claimed in functional language. Nor do Defendants point to the use of any functional language. Rather, Defendants merely argue that because there is lack of sufficient structure for “subunit,” the term must be a means-plus function limitation. The Court disagrees with Defendants, and it is clear based upon the specification that the “subunit” term has sufficient structure and was intended by the patentee to mean a “valve holder subunit.”

Because there is sufficient structure for this term as properly understood in light of the specification and it is not “insolubly ambiguous,” the Court rejects Defendants’ alternative argument that the term is indefinite.

## 9. “above”

Term	LNC’s Proposal	Defendants’ Proposal
“above” (‘263 patent: claims 1, 14 and 25 ‘386 patent: claims 1 and 41)	“over; in a higher place than; (with the spout being defined as higher than, or over, the cup)”	“over, in a higher place than, but not in contact with”

The Court finds that the term **“above”** means **“over, in a higher place than.”** While both parties agree that “above” means “over, in a higher place than,” the parties dispute each other’s additional language.

Claim 1 of the ‘263 patent provides an example of the claimed usage of the “above” term: “wherein said apparatus comprises a barrier above said flexible material.” “Above” is a simple term, is not used in the specification, and there is no evidence that the patentee intended to limit “above” to anything other than its plain and ordinary meaning. Defendants, however, attempt to include the limitation “not in contact with.” The Defendants do not base their proposed

limitation on the term “above” in the abstract, but rather on the phrase “barrier above said flexible material” and the supposed necessary relation between the barrier and the flexible material based on the specification. (*See* Dkt. No. 137 at 22-23.) The Court rejects Defendant’s proposal as an impermissible attempt to limit the claims to a preferred embodiment of a “barrier” and “flow bridge” when in a resting state. First, this language is inconsistent with the plain and ordinary meaning of the term “above.” The fact that something is higher than another object does not mean that it cannot contact that lower object. Second, nothing in the claims, specification, or prosecution history requires or limits “above” to be “not in contact with” the below referenced structure. The fact that the figures of the specification show a flow bridge not contacting the flexible member in a resting state does not limit the plain and ordinary meaning of “above” as used in the claims. Third, even Defendants admit that the flow bridge contacts the flexible membrane when fluid is flowing through the valve, despite the fact that the flow bridge is still above the flexible membrane. Accordingly, the Court rejects Defendants’ proposal.

LNC attempts to provide orientation to the “above” term by providing a reference point (above when the drinking apparatus is in the upright position; e.g., the spout is higher than the cup). The claims use the terms “below” and “above.” (*See, e.g.*, claim 1 of the ‘263 patent.) The claims and the specification treat these terms from the viewpoint of the drinking apparatus in the upright position, such that the spout is higher than (above) the cup. However, because the parties do not appear to dispute this issue and the inclusion of this phrase complicates the simple term unnecessarily, the Court rejects LNC’s additional language of “(with the spout being defined as higher than, or over, the cup).” The Court notes that neither party objected to the Court’s construction of this term when it was offered at the *Markman* hearing.

## B. DISPUTED TERMS IN AVENT’S PATENT

### 1. “mounting means”

Term	Avent’s Proposal	LNC’s Proposal
“mounting means” (‘570 patent: claims 1, 4)	“a structure on which another structure can be attached”  <i>if construed under 112(6):</i> “a hole or post on which the diaphragm attaches”	“a structure in the form of a post having an enlarged head and undercut surface, wherein the structure is an insert that fits to the spout or is molded to the lid, and wherein the diaphragm rests on the undercut surface of the enlarged head; or a hole or aperture in the inner surface of the lid that receives the enlarged head of a diaphragm, and equivalent structures thereto (construed under 112(6))”

The Court finds that this term is not a means-plus-function limitation. In addition, the Court finds that the “**mounting means**” term means “**a mounting structure.**”

The Patent Act states that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. The disputed term includes the word “means,” and thus a presumption applies that the term is a means-plus-function limitation governed by § 112, ¶ 6. *Personalized Media Comm’n, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703-04 (Fed. Cir. 1999). However, “[m]erely because a named element of a patent claim is followed by the word ‘means,’ [] does not automatically make that element a ‘means-plus-function’ element under 35 U.S.C. § 112, ¶ 6.” *Cole v. Kimberly-Clark Corp.*, 102 F. 3d 524, 531 (Fed. Cir. 1996).

The presumption that a term is a means-plus-function limitation “can be rebutted where the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003); *see also Personalized Media*, 161 F.3d at 703-704. Avent argues that the presumption is rebutted here because (i) the claim does not recite any functional language, and (ii) the claim recites structure sufficient to perform the claimed function. However, because the Court finds that there is no functional language recited in the claim, *Altiris* does not apply and the Court need not consider the second prong of the test.

The Court finds that the term “mounting means” is not a means-plus-function limitation because the claim does not recite functional language. Claim 1 of the ’570 patent merely recites “a flexible resilient diaphragm retained by mounting means on the lid.” But that alone is insufficient to invoke § 112, ¶ 6 because the claim does not recite a specified function to be carried out by the “mounting means,” which is required for the statute to apply. There is no “so that,” “to,” or “for” language relating to the “mounting means” term to describe a function the “mounting means” would perform. The Court rejects LNC’s attempt to re-write (or offer hypotheticals on how the claims could be written) the claim language in its attempt to find a non-existent function. At best, LNC proposes the function is “to mount the flexible resilient diaphragm on the lid.” (LNC’s Responsive Brief at 2, Dkt. No. 136.) The Court rejects this approach, and LNC’s argument that the fact that the word “for” does not appear in the claim is irrelevant. LNC offers no support for its proposition that it can use the “mounting means” term itself to determine the recited function. LNC relies on various cases that have held that a “mounting means” term is a means-plus function limitation. (*Id.* at 3.) First, the fact that other courts have found “mounting means” to be a means-plus-function limitation – based on different



claims that clearly recited functional language – is not dispositive here. Second, the cited cases relied upon by LNC all included claims that recited functional language for the “mounting means” term. And, as stated above, functional language is entirely missing for this claim term.

Because there is no functional language related to the “mounting means” limitation, the Court agrees with Avent that the term is not governed by § 112, ¶ 6. The Court’s conclusion is supported by the fact that many dependent claims recite other means-plus-function limitations that clearly recite functional language, in stark contrast to the “mounting means” term. (*See, e.g.,* claim 12, “wherein gripping means are provided on the diaphragm *to assist in its removal from the aperture in said wall,*” and claim 22, “wherein the insert has means thereon *for releasably attaching said insert to the closure assembly*”). Thus, the patentee clearly knew how – and did – claim a functional term under the aspects of § 112, ¶ 6 when it wanted to do so. The mere recitation of “means” did not by itself transform this element into a means-plus-function limitation governed by § 112, ¶ 6 without the recital of any functional language.

Because the “mounting means” element does not qualify for “means-plus-function” treatment, it is not limited to the structure(s) corresponding to the claimed function as “described in the specification and equivalents thereof.” *See* 35 U.S.C. § 112, ¶ 6. Instead, the Court construes the “mounting means” limitation using the ordinary canons of claim construction.

Claim 1 provides that “a flexible resilient diaphragm [is] retained by mounting means on the lid.” Per the claim language, the mounting means must be able to retain the diaphragm. There is no evidence in the claims, the specification, or the prosecution history that suggests that the patentee intended to limit the term “mounting” or “mount.” In general, the specification describes “a flexible resilient diaphragm retained by mounting means on the lid.” (‘570 patent, col. 1, ll. 44-45.) Mounting means is further described as a structure either “moulded as part of

the lid” or “provided on a separate insert.” (*Id.* at col. 1, ll. 61-63; col. 2, ll. 37-39; col. 3, ll. 44-45). Exemplary embodiments of mounting means are described as a post, a spigot, a hole, or an aperture. (*See, e.g.*, ‘570 patent at col. 1, ll. 64-64; col. 2, ll. 10-12; col. 2, ll. 43-46; col. 5, ll. 9-10.) Consistent with the term’s plain and ordinary meaning, Avent proposes that the term means “a structure on which another structure can be attached,” whereas LNC has not proposed a construction if the term is not construed as a means-plus-function limitation. Thus, there appears to be no dispute as to what “mount” means. In other words, while the parties dispute whether this term is a “means-plus-function limitation,” there is no dispute as to the meaning of “mount” if it is not governed by § 112, ¶ 6. Accordingly, the Court construes the term “mounting means” to be “a mounting structure.” The Court notes that neither party offered arguments on this term at the *Markman* hearing.

## 2. “primary sealing portion” and “primary sealing surface”

Term	Avent’s Proposal	LNC’s Proposal
“primary sealing portion” (‘570 patent: claim 1)	“a principal blocking or closing part”	“a portion of the flexible diaphragm that seals against a seat to prevent flow of liquid when negative pressure is not applied”
“primary sealing surface” (‘570 patent: claim 1)	“a principal blocking or closing part”  ( <i>same construction as “primary sealing portion”</i> )	Indefinite

The Court finds that “primary sealing portion” and “primary sealing surface” are referring to the same limitation. Thus, the Court finds that the **“primary sealing surface”** means **“primary sealing portion.”** Further, the Court finds that these terms should be given their **plain and ordinary meaning**, and no further construction is necessary.

First, the Court rejects LNC's argument that the term "primary sealing surface" is indefinite. LNC argues that the term is ambiguous because it is unclear whether the patentee intended to introduce a different word or limitation beyond the "primary sealing portion" term. In particular, LNC argues that there are three intended possibilities with this term: (i) the "primary sealing surface" was a drafting error and should be "primary sealing portion;" (ii) the "primary sealing portion" was a drafting error and should be "primary sealing surface;" and (iii) the patentee intended separate meanings to the two terms. (See Dkt. No. 136 at 11.) The Court rejects LNC's indefiniteness arguments. "If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Exxon Research and Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). Thus, indefiniteness may be found only if the claim is "insolubly ambiguous" or "not amenable to construction." See *id.*; see also *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005). Here, the term "primary sealing surface" is amenable to construction and is not "insolubly ambiguous."

Claim 1 of the '570 patent claims a diaphragm having "a primary sealing portion" and "a secondary portion," and then later claims that "the primary sealing surface is deflected away ... and the secondary sealing portion no longer makes a fluidtight seat..." (emphasis added). There is no reasonable debate that the limitation "the primary sealing surface" refers to the previously claimed "primary sealing portion." The additional fact that the "primary sealing surface" is introduced by "the" and not "a" implies that it is referring back to the "primary sealing portion" and not introducing an additional structure. While column 1, lines 45-55 of the '570 patent includes language nearly identical to the above claim language, the rest of the specification only

mentions a “primary sealing portion” and a “secondary sealing portion.” Neither the claims nor the specification distinguish “primary sealing portion” and “primary sealing surface.” There is no confusion as to this issue, and there is no reasonable debate that this is what the patentee intended. The fact that dependent claims 3, 8, and 10 refer to the “primary sealing portion” and dependent claim 17 refers to the “primary sealing surface” does not make this term indefinite and insolubly ambiguous. Reading the claims in view of the patent’s specification reveals that these two terms refer to the same element of the claimed invention. A reasonable person would conclude that both terms refer to the same limitation.

Thus, the Court finds that the term “primary sealing surface” reflects a drafting error. Accordingly, the Court construes the term “primary sealing surface” to be “primary sealing portion.” The Court may correct an error in a patent claim by interpretation if “(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003). The nature of the drafting error is apparent from the language of the claims and the specification.

Further, even if the Court were to find that there is no drafting error, the Court agrees with Avent that, in some instances, two terms used in a claim can be assigned the same meaning where the terms are used synonymously and neither the claims or the specification distinguish the two terms. *See, e.g., Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1374 (Fed. Cir. 2004); *Semitool, Inc. v. Dynamic Micro Sys. Semiconductor Equip. GMBH*, 444 F.3d 1337, 1347-48 (Fed. Cir. 2006). Reading the claims in view of the patent’s specification reveals that these two terms refer to the same element of the claimed invention. Claim 1 recites that the primary sealing “portion” makes a seal with the seat, and then further recites that the primary

sealing “surface” is deflected away from the seat to break the already-formed seal and allow fluid to flow. The only reasonable interpretation of these claim limitations requires the primary sealing “portion” and “surface” to be the same structure because they refer to the structure that forms the primary seal and neither the specification nor claims distinguish these two limitations.

Second, the Court finds that the term “primary sealing portion” (and thus “primary sealing surface”) should be given its plain and ordinary meaning. The term is simple and easily understood, and the surrounding claim language gives intended uses and results of the “primary sealing portion.” Claim 1 of the ‘570 patent states that “the diaphragm ha[s] a primary sealing portion which cooperates with a seat to make a fluidtight seal therewith.” Much of LNC’s proposal makes the surrounding claim language to the term superfluous, and thus should be rejected. Further, LNC’s proposal contains limitations not necessary as to the meaning of the term. For example, the proposed “to prevent flow of liquid when negative pressure is not applied” limitation does not provide meaning to the “primary sealing portion” term, but rather provides a related result based on when a user does not suck on the spout. In contrast, Avent argues that the “primary sealing portion” term should be given its plain and ordinary meaning, but then substitutes other words in place of seemingly simple and readily understood terms. Further, Avent takes a word as simple as “sealing” – a term that the parties do not dispute the meaning to – and substitutes it with “blocking or closing.” The Court does not find that simply replacing well-known words with other well-known words is necessary or helpful.

The remaining disputes as to this term are (i) whether the primary sealing portion “seals against a seat” (as proposed by LNC) or merely “cooperates with a seat” (as argued by Avent) and (ii) whether the primary and secondary portions are required to be part of the same

diaphragm (as proposed by LNC) or can be parts of different diaphragms (as proposed by Avent).

Regarding the dispute of “seals against a seat,” the Court finds the claim language controlling, and thus rejects LNC’s proposal. Claim 1 of the ‘570 patent clearly provides that the “diaphragm ha[s] a primary sealing portion which **cooperates with a seat** to make a fluidtight seal therewith.” (emphasis added). First, this language relates to an intended use of the primary sealing portion recited in subsequent claim language and not to the meaning of the term itself. Thus, LNC is impermissibly attempting to offer a construction for the “primary sealing portion” term where it is actually construing the subsequent “cooperates...” language. Second, the claim does not state that the primary sealing portion seals against the seat or rests against the seat or is in direct contact with the seat. Rather, it merely states that the primary sealing portion “cooperates with a seat.” The specification is also helpful here, in that it uses the word “cooperate” in many instances:

“a sealing surface (9) which **cooperates** with a bead (16) around a central hole (22) in the diaphragm”

“said diaphragm having a primary sealing portion which **cooperates** with a seat to make a fluidtight seal therewith”

“a post extending from the insert having an enlarged head with an undercut surface which provides the seat to **cooperate** with the primary sealing portion of the diaphragm”

“the enlarged head 8 is conical in configuration with an upper surface which provides an annular sealing surface or seat 9 for **cooperation** with diaphragm 14”

(See ‘570 patent, Abstract, col. 1, ll. 45-47; col. 2, ll. 43-46, col. 3, ll. 55-57 (emphasis added).)

In other instances, the specification states that the primary sealing portion can be in “contact with a seat” and that the secondary sealing portion can “rest against” the under surface of the lip. (See ‘570 patent, col. 2, ll. 60-63 and col. 4, ll. 24-26.) The Court is not persuaded that the claim

language of “cooperates with a seat” should be changed or is equivalent to “against the seat.” Further, the Court is not persuaded that this language – relating to an additional limitation appearing later in the claim – should be inserted into the term “primary sealing surface.” Thus, the Court finds LNC’s proposal to be superfluous with and contrary to the language of claim 1, and therefore rejects it.

Regarding the dispute of whether the first and second sealing portions can be located in different diaphragms, the Court finds the claim language controlling, and thus rejects Avent’s proposal. Avent’s proposal is inconsistent with the language of the claim and inconsistent with the plain meaning of the first and second sealing portion terms. Claim 1 of the ‘570 patent clearly provides that the same diaphragm has both a “primary sealing portion” and a “secondary sealing portion:”

**a flexible resilient diaphragm** retained by mounting means on the lid to normally prevent liquid flow through the spout, **said diaphragm having a primary sealing portion** which cooperates with a seat to make a fluidtight seal therewith, **the diaphragm also having a secondary sealing portion** which normally covers a breather hole to make a fluidtight seal therewith,

(emphasis added.) Thus, the claim expressly states that “said diaphragm [has] a primary sealing portion” and that “the diaphragm also [has] a secondary sealing portion.” To the extent the patentee wanted to claim the primary and secondary sealing portions to be found on different diaphragms, it could have but chose not to do so. Likewise, the fact that the terms expressly include the word “portion” implies that the structures are part of the same diaphragm. Still further, the fact that the terms expressly include the words “first” and “second” portion of “the diaphragm” implies that the structures are part of the same diaphragm. While the Court agrees with the cases cited by Avent that, in general, the article “a” or “an” can mean “one or more” and the use of “comprising” is generally open-ended, the meaning of a claim term depends on the context in which the term is used and the surrounding claim language. For claim 1 of the ‘570

patent, the claim language is clear that both the primary sealing portion and secondary sealing portion structures are found on the same diaphragm. This construction is not limiting the terms to a preferred embodiment, but is based on the claim language. Further, this construction is not limiting the claim to one diaphragm as Avent suggests, but merely requires – based on the claim language – that the first and second sealing portions be on the same diaphragm. As Avent’s argument is contrary to the plain and ordinary meaning of the terms, and inconsistent with the claim language, the Court need not insert a requirement (such as LNC’s proposed limitation of “the same diaphragm” for “secondary sealing portion”) stating that the structures are part of the same diaphragm.

Because adopting a plain and ordinary meaning, consistent with the rationale found above, resolves the disputes between the parties as to these terms, no further construction is necessary.

### 3. “secondary sealing portion”

Term	Avent’s Proposal	LNC’s Proposal
“secondary sealing portion” (‘570 patent: claim 1)	”an auxiliary blocking or closing part”	“in the same diaphragm having a primary sealing portion, a second portion of the diaphragm that seals a breather hole to prevent flow of air when negative pressure is not applied”

For the same reasons found above regarding the “primary sealing portion” term, the Court finds that the term “**secondary sealing portion**” should be given its **plain and ordinary meaning**. Much like the “primary sealing portion” term, the parties dispute whether a more limited construction is necessary or whether the plain and ordinary meaning applies.

LNC’s proposal inserts additional limitations that are not required by the claims or the specification. Claim 1 of the ‘570 patent states that “the diaphragm also ha[s] a secondary



sealing portion which normally covers a breather hole to make a fluidtight seal therewith.” Much of LNC’s proposal makes the surrounding claim language to the term superfluous, and thus should be rejected. Further, LNC’s proposal contains limitations not necessary as to the meaning of the term. For example, the proposed limitation “that seals a breather hole to prevent flow of air when negative pressure is not applied” does not provide inherent meaning to the “secondary sealing portion” term, but rather describes a related result when the device’s user takes no action (in other words, when a user does not suck on the spout). LNC’s construction is also inconsistent with the surrounding claim language. The claim states that the secondary sealing portion normally “covers” a breather hole, but then LNC substitutes “seals” for “covers.” Putting aside that this proposed language does not describe the structure of the “secondary sealing portion,” LNC offers no reason for why the Court should disregard the plain language of the later phrase in the claim and substitute that phrase with different terms chosen by LNC.

Avent argues that the “secondary sealing portion” term should be given its plain and ordinary meaning, but then substitutes other words in place of seemingly simple and readily understood terms. The Court does not find that simply replacing well-known words with other well-known words is helpful.

As discussed above regarding the “primary sealing portion” term, the Court rejects Avent’s proposal that the first and second sealing portions can be located in different diaphragms. As Avent’s argument is contrary to the plain and ordinary meaning of the terms, and inconsistent with the claim language, the Court need not insert a requirement (such as LNC’s proposed limitation of “the same diaphragm”) stating that the structures are part of the same diaphragm.

Because adopting a plain and ordinary meaning, consistent with the rationale found above, resolves the disputes between the parties as to these terms, no further construction is necessary.

#### 4. “seat”

Term	Avent’s Proposal	LNC’s Proposal
“seat”  (‘570 patent: claim 1)	“a support for a seal”	“a structure for the diaphragm to rest and seal against”

The Court finds that the term “**seat**” means “**sealing surface.**” “When a patentee explicitly defines a claim term in the patent specification, the patentee’s definition controls.” *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (citing *Phillips*, 415 F.3d at 1321). In this instance, the patentee acted as a lexicographer and defined “seat” to mean “sealing surface:”

... an enlarged head (8) which provides a **sealing surface (9)** ...

... the **seat is an annular surface** thereon. In one embodiment, the post has an enlarged head with an undercut **surface** thereon which provides said **annular seat**.

...the enlarged head 8 is conical in configuration with an upper surface which provides an **annular sealing surface or seat 9** for cooperation with diaphragm 14...

...**annular sealing face 9** on the enlarged head.

...the **sealing surface or seat 9** on the enlarged head 8...

(See ‘570 patent, Abstract, col. 1, ll. 64-67; col. 3, ll. 55-57; col. 4, ll. 14-15; col. 4, ll. 30-31 (emphasis added).) Thus, the specification repeatedly equates “sealing surface” to “seat.” Further, both parties admit in their briefing that the specification equates the term “sealing surface” to “seat.” The term “seat” is only found in claim 1 of the ‘570 patent, and this construction is consistent with the usage of “seat” in claim 1, which requires the “primary sealing

portion” to “cooperate[] with a seat to make a fluidtight seal therewith.” Similarly, dependent claims confirm that the seat is a sealing surface. (*See, e.g.*, claim 5, “the seat is an annular surface thereon [a post],” and claims 6 and 20.)

There is no reason to depart from the construction the patentee provided for this term. Further, the term “seating surface” is more accurate than either of the parties’ proposed constructions. LNC’s proposal is rejected because the claims and the specification do not support importing the requirement that the “seat” must necessarily “rest against” the diaphragm. Avent’s proposal is rejected because there is no support for the proposition that the “seat” be a “support for a seal.” The Court notes that neither party objected to the Court’s construction of this term when it was offered at the *Markman* hearing.

### **CONCLUSION**

The Court adopts the above constructions. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

**SIGNED this 9th day of July, 2013.**

  
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ROY S. PAYNE  
UNITED STATES MAGISTRATE JUDGE